

College of Science and Engineering Technology

Department of Agricultural Sciences

COURSE SYLLABUS

PLSC 4320 - Fruit and Vegetable Production

3 credit hours (2-2 Format)

Fall 2017

LOCATION/TIME: Lecture: Tu & Th 9:30 a.m. – 10:20, Pirkle 210A
Lab: Tuesday from 3:00 – 4:50, Pirkle 100 & various locations

INSTRUCTOR: Robert A. Lane, Professor
Pirkle 450A, phone 294-1225
e-mail: blane@shsu.edu
Office hours: posted on office door, please call or e-mail for appointment if I'm not available when dropping by.

TEXT: All PowerPoint presentations used in lecture will be made available through BlackBoard after the lecture has been presented in class. You should take adequate notes in class to supplement these materials. Readings from various sources will be assigned, both in class and through announcements on BlackBoard. You are expected to keep up with all assignments. You are also expected to use the internet to find additional information related to the subjects being discussed in class. If you have trouble finding the information requested, contact me or other students in the class that have been more successful.

COURSE OBJECTIVES:

This course is designed to provide students with common principles and practices of commercial and domestic fruit and vegetable production, with special emphasis on the southern U.S. Students are expected to show proficiency in all topics presented on the course outline.

COURSE OUTLINE:

- I. Introduction
 - A. Overview of the U.S. fruit and vegetable industry
 - B. Texas statistics
 - C. Common industry concerns and issues today
 - D. Laboratory Safety
- II. Gardening Basics
 - A. Site selection
 - B. Soil preparation and modification
 - C. Composting and other soil amendments

- D. Natural and synthetic nutrient sources
- E. Green manures and cover crops
- F. Mulching
- G. Water Quality
- H. Climate

III. Vegetable Crops

- A. Classification
- B. Seasonal requirements
- C. Propagation
- D. Hybrids vs. Heirlooms
- E. Crop rotation
- F. Specific production requirements
- G. Processing and preservation

IV. Fruit and Nut Crops

- A. Classification
- B. Environmental considerations
 - 1. Hardiness ratings
 - 2. Stratification and vernalization requirements
- C. Maintenance requirements
 - 1. Space requirements
 - 2. Freeze protection
 - 3. Pruning/Grafting
 - 4. Espaliering

V. Pest Problems and Their Management

- A. Insects & mites
- B. Nematodes
- C. Birds
- D. Mammals
- E. Weeds
- F. Diseases

VI. Harvesting and Marketing of Fruits and Vegetables

COURSE EVALUATION:

This course consists of 2 hours lecture plus 2 hours laboratory per week. Three lecture exams will be given, of which one is the final. All will carry equal weight with the lecture average comprising 65% of the course grade. The laboratory portion of the course grade (35%) will be derived from a combination of attendance and participation in field trips and labs (10%), maintenance of transplants and assigned field plots (20%) and homework assignments (5%).

GRADUATE STUDENTS:

Graduate students taking this course for graduate credit are required to complete a mini-research project in the greenhouse or field plots. The project will be designed to test a treatment effect on a particular fruit or vegetable crop. A final report, including literature review, materials and methods, results and discussion and references, is due during the last week of classes.

RECOMMENDED OR REQUIRED READINGS:

There is no assigned text for this course, but reading assignments covering materials on the internet or copies of reference materials handed out in class or placed on BlackBoard will be made regularly. Students are expected to keep up with readings and will be held responsible for them on exams.

ATTENDANCE POLICY

My attendance policy will be in accordance to that established by the university. Attendance will be recorded daily. Please do not make a habit of arriving to class late.

ACADEMIC DISHONESTY:

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials. Any students found to engage in dishonest activities related to this class may receive a grade of F for the course.

COMMUNITY ENGAGEMENT ACTIVITIES

This course is designated as an ACE (Academic Community Engagement) course. Through field lab experiences and out-of-class/lab activities and assignments, we will produce and deliver vegetables grown by class members to Good Shepherd Mission and other community food kitchens as surplus crops become available. Students will also provide assistance with community gardening/orchard activities in the Huntsville/Walker County region. Community engagement activities are expected to range from 10-20 hours per student during the semester. Through this activity, you will hopefully gain a better understanding of how local gardeners and growers can have a positive influence on the nutritional well being of our less fortunate citizens.

STUDENT ABSENCES ON RELIGIOUS HOLY DAYS POLICY:

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Section 51.911 (a) (2) defines a religious holy day as: “a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20....” A student whose absence is excused under this subsection may not be

penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed.

STUDENTS WITH DISABILITIES POLICY:

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the University. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance are expected to visit with the Office of Services for Students with Disabilities located in the Counseling Center. They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Counseling Center and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Counseling Center.

VISITORS IN THE CLASSROOM:

Only registered students may attend class. Exceptions can be made on a case-by-case basis by the professor. In all cases, visitors must not present a disruption to the class by their attendance. Students wishing to audit a class must apply to do so through the Registrar's Office

CELL PHONE USAGE:

Unless one is expecting an urgent call or communication, I expect cell phones to be silenced and put away during class/lab. I consider text messaging and other means of communicating with others while class is in session to be distracting and disrespectful. If an urgent contact is expected, please let me know before class.